(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 24 July 2003 (24.07.2003)

PCT

(10) International Publication Number WO 2003/059778 A3

(51) International Patent Classification⁷: 85/804

.__

B65D 81/00, (

(21) International Application Number:

PCT/EP2003/000384

(22) International Filing Date: 13 January 2003 (13.01.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

02000943.7

16 January 2002 (16.01.2002) EP

(71) Applicant (for all designated States except US): SOCI-ETE DES PRODUITS NESTLE S.A. [CH/CH]; P.O. Box 353, CH-1800 Vevey (CH).

- (72) Inventors; and
- (75) Inventors/Applicants (for US only): DENISART, Jean-Luc [CH/CH]; Le Vigny 2, CH-1096 Cully (CH). CAHEN, Antoine [CH/CH]; Les Ateliers du Nord, Place du Nord 2, CH-1005 Lausanne (CH). YOAKIM, Alfred [FR/CH]; Ch. de la Routiaz 2, CH-1806 St-Légier-La Chiesaz (CH).

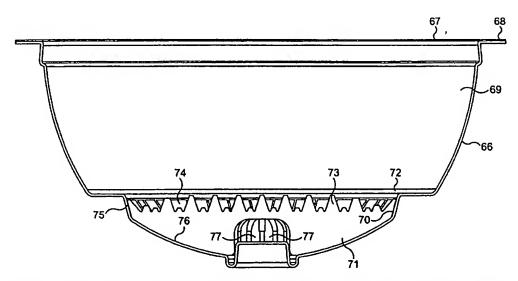
- (74) Agent: THOMAS, Alain; Avenue Mestlé 55, CH-1800 Vevey (CH).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, Cl, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,

[Continued on next page]

(54) Title: CLOSED CAPSULE WITH OPENING MEAN



(57) Abstract: The present invention relates to a closed capsule designed to be extracted under pressure in an extraction device, containing a substance (69) for the preparation of a beverage, comprising a closed system (66, 67) containing the said substance (69) and a means (73) inside the said system allowing the said capsule to be opened at the time of its use and allowing the said beverage to flow out without contact with its extraction system.

MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent

(GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

Published:

- with international search report
- (88) Date of publication of the international search report: 8 January 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SCANOII REFORT

PCT/EP 03/00384

A. CLASSIF IPC 7	B65D81/00 B65D85/804		ļ	
According to	International Patent Classification (IPC) or to both national classificat	ion and IPC		
B. FIELDS				
IPC 7	cumentation searched (classification system followed by classification $B65D - A47J$			
	ion searched other than minimum documentation to the extent that su			
Electronic de	ata base consulted during the international search (name of data bas	e and, where practical, search terms used)	
C. DOCUME	ENTS CONSIDERED TO BE RELEVANT			
Category *	Citation of document, with Indication, where appropriate, of the rele	vant passages	Relevant to claim No.	
X,P	WO 02 081337 A (MAJER DOGLIONI LUCA;TUTTOESPRESSO S P A (IT)) 17 October 2002 (2002-10-17) page 7, line 15 -page 10, line 3; figures 4-10		1-3,5,6, 8,21-24, 26-29	
X	GB 1 256 247 A (KANTOR INTERNATIO 8 December 1971 (1971-12-08) cited in the application page 1, line 53 -page 2, line 48; 1-7	1,21-24, 26,27		
	_	·/		
X Furt	ther documents are listed in the continuation of box C.	X Patent family members are listed	i in annex.	
 Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combined with one or more other such documents, such combination being obvious to a person skilled in the art. "B" document member of the same patent family 				
	e actual completion of the international search 22 May 2003	Date of mailing of the International search report 25/07/2003		
	malling address of the ISA	Authorized officer		
	European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Filjswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Berrington, N		

IN I EMINATIONAL SEARCH REPORT

Interns upplication No PCT/EP 03/00384

0.40 11	NAME OF THE PROPERTY OF THE PER EVANT	101721 037 00304
Category •	ation) DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Category -	Charlott of document, with indication, where appropriate, or the relation peccases	
X	US 5 259 295 A (TIMM EBERHARD) 9 November 1993 (1993-11-09) column 3, line 28 - line 50	1-6, 8-13,15, 21-24, 26-29
	column 4, line 9 - line 32; figures 1-3,7,9,10	
X	DE 23 27 264 A (BEDNARTZ HUGO) 2 January 1975 (1975-01-02) page 11, line 3 -page 12, line 7; figures 6-7A	1,26
X	US 4 077 551 A (MANARESI ADRIANA) 7 March 1978 (1978-03-07) column 2, line 46 -column 3, line 36; figures 4,5	1-3, 26-29
X	FR 2 620 921 A (FAFOURNOUX BERNARD)	1
A	31 March 1989 (1989-03-31) page 4, line 11 -page 5, line 23; figures	4
	3,4	
X	EP 0 451 980 A (GEN FOODS KRAFT LTD) 16 October 1991 (1991-10-16)	1
	column 9, line 13 - line 52; figures 5A,5B	
	•	

INTERNATIONAL SEARCH REPORT

al application No.

Box I	Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)
This inte	ernational Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1.	Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
2.	Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
з. 🗌	Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box II	Observations where unity of invention is lacking (Continuation of item 2 of first sheet)
This into	emational Searching Authority found multiple inventions in this international application, as follows:
	see additional sheet
1.	As all required additional search fees were timely paid by the applicant, this international Search Report covers all searchable claims.
2. X	As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.	As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4.	No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
Remari	The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA	210						
This International Searching Authority found multiple (groups of) inventions in this international application, as follows:							
in the same that the same that appropries	, 						
	_						
	j						

INTERNATIONAL SEARCH REPORT

on on patent family members

Intern plication No PCT/EP 03/00384

				1.0	21/EI	03/00384
Patent document cited in search report		Publication date		Patent family member(s)		Publication date
WO 02081337	A	17-10-2002	IT WO	MI20010741 A 02081337 A		07-10-2002 17-10-2002
GB 1256247	A	08-12-1971	AT BE CH DE ES FR IE LU MT NL OA	283183 E 740896 / 515155 / 1954209 / 153070 \ 2022482 / 33402 E 57420 / 598 / 6916281 / 3156 /	A A A Y A B B A A A	27-07-1970 01-04-1970 15-11-1971 27-05-1970 16-10-1970 31-07-1970 12-06-1974 04-03-1969 11-09-1971 06-05-1970 15-12-1970
US 5259295	A	09-11-1993	DE AT DE DK EP ES HK JP SU US	9013838 1 119368 1 59104862 1 479111 1 0479111 / 2071182 1 157995 / 4364818 / 1837834 / 5287796 /	 U1 T D1 T3 A1 T3 A A	06-02-1992 15-03-1995 13-04-1995 24-07-1995 08-04-1992 16-06-1995 13-10-1995 17-12-1992 30-08-1993 22-02-1994
DE 2327264	A	02-01-1975	DE	2327264	A1.	02-01-1975
US 4077551	Α	07-03-1978	NONE	•		
FR 2620921	A	31-03-1989	FR	2620921	A1	31-03-1989
EP 0451980	A	16-10-1991	AT CA DE DE DK EP ES HK JP JP KR	111856 7 2039243 7 69104106 1 69104106 7 451980 7 0451980 7 2060297 7 146494 7 2690207 1 5097166 7	A1 · D1 T2 T3 A2 T3 A B2 A	15-10-1994 01-10-1991 27-10-1994 19-01-1995 20-02-1995 16-10-1991 16-11-1994 30-12-1994 10-12-1997 20-04-1993 30-03-1999